UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED

DATE: **19-MAY-2018** TIME: **1323** HOURS

2. OPERATOR: **Anadarko Petroleum Corporation**
REPRESENTATIVE:
TELEPHONE:

CONTRACTOR: **Nabors Offshore Corporation**
REPRESENTATIVE:
TELEPHONE:

- [ ] STRUCTURAL DAMAGE
- [ ] CRANE
- [ ] OTHER LIFTING
- [ ] DAMAGED/DISABLED SAFETY SYS.
- [x] INCIDENT >$25K **Equipment Damage**
- [ ] H2S/15MIN./20PPM
- [ ] REQUIRED MUSTER
- [ ] SHUTDOWN FROM GAS RELEASE
- [ ] OTHER

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:

4. LEASE: **G11081**
AREA: **GC** LATITUDE:
BLOCK: **645** LONGITUDE:

5. PLATFORM: **A(HOLSTEIN SPAR**
RIG NAME: **HOLSTEIN SPAR RIG**

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [x] DEVELOPMENT/PRODUCTION (DOCD/POD)

7. TYPE:
- [ ] HISTORIC INJURY
- [x] REQUIRED EVACUATION **2**
- [ ] LTA (1-3 days)
- [ ] LTA (>3 days
- [ ] RW/JT (1-3 days)
- [x] RW/JT (>3 days) **2**
- [ ] Other Injury
- [ ] FATALITY
- [ ] POLLUTION
- [ ] FIRE
- [ ] EXPLOSION

LWC
- [ ] HISTORIC BLOWOUT
- [ ] UNDERGROUND
- [ ] SURFACE
- [ ] DEVERTER
- [ ] SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K

8. OPERATION:
- [ ] PRODUCTION
- [x] DRILLING
- [ ] WORKOVER
- [ ] COMPLETION
- [ ] HELICOPTER
- [ ] MOTOR VESSEL
- [ ] PIPELINE SEGMENT NO.
- [ ] OTHER

9. CAUSE:
- [ ] EQUIPMENT FAILURE
- [x] HUMAN ERROR
- [ ] EXTERNAL DAMAGE
- [ ] SLIP/TRIP/FALL
- [ ] WEATHER RELATED
- [ ] LEAK
- [ ] UPSET H2O TREATING
- [ ] OVERBOARD DRILLING FLUID
- [ ] OTHER _____

10. WATER DEPTH: **4340** FT.

11. DISTANCE FROM SHORE: **119** MI.

12. WIND DIRECTION:
SPEED: M.P.H.

13. CURRENT DIRECTION:
SPEED: M.P.H.

14. SEA STATE: FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

17. INVESTIGATION FINDINGS:

On May 19, 2018, an incident occurred on board the Holstein Spar Rig working for Anadarko in Green Canyon Block 645. While utilizing the lateral support guide frame (LSG) as a work platform, the drill crew began operations to rig down the blow out preventers (BOP's) and high pressure riser on the A-8 well. During this operation, the LSG fell approximately 17 feet after two employees removed the nuts that bolted the frame to the riser. Both employees were injured and sent in on a medivac helicopter for further medical treatment.

On the morning of May 19th, the day drill crew began the process of removing the BOP's from the completed A-8 well. The crew involved consisted of the Toolpusher, Driller, Assistant Driller (A/D), a Derrickhand, a Shakerhand and (2) Floorhands. Prior to commencing work, a Job Safety Analysis (JSA) was reviewed and signed by the crew. Attached to the JSA was a four page, step by step procedure to nipple down the BOP's and the high pressure riser. The Driller met with the drill crew that was performing this task on the BOP deck and gave instructions on how to complete the procedure, up to connecting the lifting cap on the high pressure riser. He also instructed the crew to stop once the lifting cap was secured. He would return prior to starting the next step in the procedure and give further instructions. Once the riser cap was bolted onto the riser, the Driller proceeded back to the BOP deck and met with the drill crew and service technicians to discuss the plan forward.

After meeting with the drill crew, the Driller proceeded to the drill floor to lower the wire rope slings through the rotary table using the drawworks and traveling block. Once the high pressure riser cap was secured, the wire rope slings were lowered and shackled to the riser cap as instructed. The Driller heard a loud noise while powering down the drawworks and proceeded to the BOP deck to investigate the sound. Upon arrival, the he saw that the LSG frame had dropped approximately 17 feet to the mezzanine deck below. One employee was found being assisted off the top of the frame by two service technicians using a ladder, and another employee had fallen an additional 9 feet to the mezzanine deck. Both employees were injured from the fall and were transported by medivac to a hospital for further medical evaluations.

The Bureau of Safety and Environmental Enforcement (BSEE) investigation team conducted the initial onsite investigation on May 19, 2018. The team collected evidence, took photographs, collected statements from witnesses, and interviewed personnel involved. It was discovered that once the riser cap was bolted in place and the wire rope slings secured to the riser cap with shackles, the Toolpusher instructed two drill crew employees to start removing all but 4 of the 1 ½" nuts on the sixteen studs that were holding the high pressure riser to the LSG frame in place. The drill crew employees, one a Floorhand and the other a Shakerhand, removed all of the 1 ½" nuts from the sixteen studs. This direction from the Toolpusher contradicted what the Driller discussed with the drill crew prior to the Toolpusher arriving on the BOP deck. Once the last nut was removed, the LSG frame dropped with both crew members standing on it.

During interviews, BSEE Investigators learned that the Toolpusher had not read the JSA or the procedure prior to the incident. He had signed the documentation, but did not actually read the documents until after the incident. He had been promoted from Deck Foreman only five days prior to the incident, and had never been involved with this procedure before. BSEE Investigators also learned that the Driller was the only member of the crew that had experience with this task, but the crew disregarded his instructions to not remove any bolts because the Toolpusher instructed them to do so. According to interviews, the crew felt that since the Toolpusher was the Drillers supervisor, they must follow his orders as he must have known what needed to be done.

The Toolpusher arrived to the work site after the Driller went to the drill floor, and instructed crew members to remove the bolts from the high pressure riser to the LSG

frame. This was against the Drillers instructions, and most notably it was out of step with the procedure. During interviews with BSEE's investigation team, it was noted that one of the Floorhands involved with the procedure told the rest of the crew that the Driller had instructed them to only install the lifting cap on the riser and to not remove any bolts. He told the crew that they shouldn't be removing the bolts, but they proceeded regardless. It was later learned that this Floorhand had felt the LSG frame shift while it was being unbolted and he moved outside of the work area while the other Floorhand and Shakerhand continued unbolting the high pressure riser from the LSG frame.

The correct procedure for removing the riser from the LSG frame would have been to bolt the lifting cap onto the riser, release the riser from the wellhead, lift the riser and LSG frame until the lateral support dogs could be pulled into place, pull out the support dogs, lower the riser and LSG frame onto the beams at which point the LSG and Riser would be supported, remove the nuts from the studs holding the riser to the LSG, and pull the riser out of the LSG frame. At the Toolpusher's instruction, the crew unbolted the nuts from the studs holding the riser to the LSG before the LSG frame was supported by the dogs. The failure to follow the planned procedure triggered the incident and left two employees injured.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

- Failure to follow the planned procedure.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

- Conflicting instructions from the rig's management. The Driller gave instructions for the crew to not remove any bolts from the riser and LSG frame, but the Toolpusher gave instructions for the crew to remove the bolts.

- Failure to stop work when instruction was given that was not in line with the planned procedure.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED: NATURE OF DAMAGE:

Lateral guide frame, handrails, cable trays **Lateral guide frame, handrails, cable trays**

ESTIMATED AMOUNT (TOTAL): **$81,000**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Houma District has no recommendations for the Office of Incident Investigations at this time.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

One INC was issued as follows:

G-110: On May 19,2018, 2 employees were injured while not following procedure. The employees were removing the nuts supporting the high pressure riser to the lateral support frame which allowed the frame to fall approximately 16 feet to the mezzanine deck.

25. DATE OF ONSITE INVESTIGATION:

19-MAY-2018

26. INVESTIGATION TEAM MEMBERS:

Josh Naquin / Paul Reeves /

28. ACCIDENT INVESTIGATION PANEL FORMED: **NO**

OCS REPORT:

29. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED DATE: **27-JUL-2018**